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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,210	02/13/2004	Christopher R. Cording	0124-122	2489
6449 7590 10/16/2008 ROTHWELL, FIGG, ERNST & MANBECK, P.C. 1425 K STREET, N.W. SUITE 800 WASHINGTON, DC 20005				
EXAMINER GILBERT, WILLIAM V				
ART UNIT 3635		PAPER NUMBER		
NOTIFICATION DATE 10/16/2008		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-PAT-Email@rfem.com

### Office Action Summary

**Application No.**

10/777,210

**Applicant(s)**

CORDING, CHRISTOPHER R.

**Examiner**

William V. Gilbert

**Art Unit**

3635

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 5-21, 23-28, 30-42, 44-74, 76-85 and 87-123 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-21, 23-28, 30-42, 44-74, 76-85 and 87-123 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Final Drawing Review (PTO-849)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 7/9/08
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

This is a Final Office Action. Claims 4, 22, 29, 43, 75 and 86 have been cancelled. Claims 1-3, 5-21, 23-28, 30-42, 44-74, 76-85 and 87-123 are pending and examined below.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 1-3, 5-21, 23-28, 30-42, 44-74, 76-85 and 87-123 are**

rejected under 35 U.S.C. 103(a) as being unpatentable over Heaney (U.S. Patent No. 4,477,129) in view of Misonou (U.S. Patent No. 6,830,791) and the Applicant's Specification.

Claims 1, 26, 47, 61, 71, 90, 104 and 117: Heaney discloses a door having inner, outer and middle sheets of glass (Fig. 7: 70, 70', 70''), first and second sealants (Fig. 7, the seals are between the glass sheets) and a frame (see Fig. 7, generally). Heaney discloses a coating (75), which may be placed on virtually any of the panels (Col. 8, lines 34-40). Heaney does not disclose two emissivity coatings. Misonou discloses a glass panel system with an emissivity coating (Col. 4, lines 46-50). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use emissive coatings in order to aid in the reduction of heat transfer through the glass sheets. Further, it would have been obvious at the time the invention was made to a person having ordinary skill in the art as a matter of duplication of parts to have multiple coatings because duplication of parts has no patentable significance unless a new and unexpected result is produced. *In re Harza*, 274 F.2d 669 (CCPA 1960). See MPEP §2144.04. Next, the prior art of record does not disclose the U-value as claimed. It would have been obvious at the time the invention

was made to a person having ordinary skill in the art as a matter of design choice to have this limitation because Applicant states on pages 8 and 9 of the Specification that this is required to comply with US standards and prevent condensation. Per Claim 104, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have the temperature limitations as a design choice in order to have an apparatus that would resist condensation. The phrase "adapted for use in a refrigerator compartment" (e.g. claim 1, lines 1 and 2) is a statement of intended use of the claimed invention and must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Claims 2, 27, 52, 64, 72, 91 and 119: Heaney discloses a first chamber (72), a second chamber (74), and a gas (air) in the chambers.

Claims 3, 6, 28 and 77: the prior art of record does not disclose the thickness nor spacing as claimed. It would have been obvious at the time the invention was made to a person

having ordinary skill in the art as a matter of design choice to have this limitation in order to make a relatively light structure that would resist breaking and still function properly.

Claims 5, 23-25, 44-46, 53, 65, 76, 87-89, 94, 101-103, 109, 116, 120 and 123: while the prior art of record does not disclose the heat transfer rate as claimed, it would have been obvious at the time the invention was made to a person having ordinary skill in the art as a matter of design choice to have this limitation in order to have a structure that functioned properly to conform to US regulations while preventing the fogging of the panels.

Claims 7 and 8: while the prior art of record discloses the gas is air (Heaney), it does not disclose that the gases in the two chambers are the same or different, though Misonou discloses various gases (Col. 10, lines 10-15). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to have this limitation because each inert gas would perform successfully and one could place a different gas in each chamber.

Claims 9, 30, 54, 66, 79 and 97: the gas is air (Heaney).

Claims 10, 31, 34, 55, 67, 68, 80, 98, 108 and 110: the prior art of record discloses the claimed invention except for the U value of the glass. It would have been obvious at the time the invention was made to a person having ordinary skill in the art as a matter of design choice to have this limitation because Applicant admits in the Specification pages 8 and 9 that a value approximately to 0.2 is required to conform to US performance requirements, and the limitations as claimed are approximate to this value.

Claims 11-15, 32, 33, 35, 36, 56-58, 69, 70, 81-83, 99, 100, 111-113, 121 and 122: the prior art of record discloses the claimed invention except for the emissivity rating. It would have been obvious at the time the invention was made to a person having ordinary skill in the art as a matter of design choice to have this limitation in order to minimize the level of heat transfer among the panels to prevent condensation.

Claims 16, 37 and 84: the prior art of record discloses the emissivity coating is fluorine doped tin oxide (Misonou: Col. 4, lines 45-50).

Claims 17, 38 and 85: while the prior art of record does not disclose the method of application, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to apply the coating as a spray coating because it is well known to spray liquids onto surfaces to facilitate even coatings.

Claims 18 and 39: the prior art of record discloses a frame (Heaney: Fig. 6), it does not disclose the material of the frame as claimed. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to have the frame of aluminum, plastic or fiberglass because these materials are well known in the art for the use of frames and would perform equally as well.

Claims 19-21, 40-42, 50, 51, 59, 60, 107, 114, 115: while the prior art of record does not disclose the temperatures and humidity as claimed, it would have been obvious at the time the invention was made to a person having ordinary skill in the art as a matter of design choice to have the limitations because one of ordinary skill in the art can set the climate control of a refrigerator and building and the prior art of record is capable



of not forming condensation.

Claims 48, 62, 73, 92, 105 and 118: the prior art of record (Heaney Fig. 7) discloses a second sealant assembly and a third sheet of glass which form the insulating glass unit.

Claims 49, 63, 74, 93 and 106: the prior art of record discloses a low emissive material for coating the sheets of glass (Misonou Col. 4, lines 45-50)

Claims 78, 95 and 96: the glass is in a door frame (Heaney: Fig. 1).

### ***Response to Arguments***

2. The following addresses applicant's remarks/arguments dated 09 July 2008:

### **Provisional Double Patenting Rejection:**

The examiner notes applicant's response and willingness to file a terminal disclaimer (if warranted). In the interim, the double patenting rejection remains as a provisional.

**Rejection - 35 USC 103:**

Applicant's arguments are, respectfully, not persuasive. Regarding the combination of the references to achieve the emissivity coating, the examiner maintains the position that while the particular U-value of the emissivity coatings is not provided, a U-value is an inherent feature to such low emissivity coatings as the one provided in Misonou (see Col. 2 lines 35 and following). It was by applicant's own disclosure (Specification: page 8) that disclosed that U.S. standards do not permit condensation; the examiner merely used this to show that if the limitation is required by regulations, then it would clearly be obvious to have the combination of the prior art be designed to meet the limitations as claimed. Further, to achieve the U-value as claimed would have been obvious at the time the invention was made to a person having ordinary skill in the art to have this limitation because optimizing a limitation will not support patentability of subject matter encompassed by the prior art unless there is evidence indicating such a limitation is critical. See M.P.E.P. §2144.05 "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." *In re Aller*, 220 F.2d 454 (CCPA 1955) (Claimed process which was performed at a temperature between

40C and 80C and an acid concentration between 25% and 70% was held to be *prima facie* obvious over a reference process which differed from the claims only in that the reference process was performed at a temperature of 100C and an acid concentration 10%.)

Regarding the use of the Misonou reference, the examiner disagrees with applicant's assertion that the reference is not directed to any aspect of refrigeration. See Misonou, Col. 10, lines 60-67 where the members may be used with refrigeration, including the doors or wall.

Further, applicant's definition of "energy free" provides no structural definition to the claim as applicant has not provided in the claims what constitutes "energy free". As claimed, the examiner maintains the position that the combination of the prior art of record results in an "energy free" system as claimed.

### ***Conclusion***

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS

of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William V. Gilbert whose telephone number is 571.272.9055. The examiner can normally be reached on Monday - Friday, 08:00 to 17:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on 571.272.6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/W. V. G./  
Examiner, Art Unit 3635  
/Basil Katcheves/  
Primary Examiner, Art Unit 3635